Technical Data Sheet Purified Mouse Anti-CD220

Product Information

Material Number:	610110
Alternate Name:	Insulin Receptor β
Size:	150 μg
Concentration:	250 µg/ml
Clone:	46/CD220
Immunogen:	Human Insulin pro-receptor β subunit 1006-1144
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Mouse Tested in Development: Rat
Target MW:	95 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and $\leq 0.09\%$ sodium azide.

Description

Insulin Receptor (IR) is a transmembrane receptor tyrosine kinase which, upon insulin binding, initiates a cascade of events, including autophosphorylation, phosphorylation of cellular protein substrates, glucose transport, and glycogen synthesis. IR is synthesized as a large glycosylated precursor that is cleaved upon maturation into a 130 kDa α -subunit with kinase activity and a 95 kDa β -subunit. The active Insulin Receptor is a heterotetramer of homologus α and β subunits joined by disulfide bonds. Among the major cytosolic substrates of the Insulin Receptor are IRS-1 and -2, β -Adrenergic receptor, and pp15 (adipocyte lipid-binding protein, ALBP). Autophosphorylation of the IR recruits IRS-1 and -2 to the phosphotyrosines. Subsequently, the phosphorylated IRS-1 and -2 act as docking sites for other signaling proteins like PI3-Kinase, Shc, PTP1D, Nck, etc. In addition, the phosphatase LAR is tightly associated with the IR and LAR becomes activated after insulin stimulation dephosphorylating the IR and its substrates. Therefore, LAR provides a turn-off mechanism in insulin signaling.

This antibody is routinely tested by western blot analysis. Other applications were tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.





Immunofluorescence staining of PFSK-1 cells (human neuroectodermal tumor line; ATCC CRL-2060).

Western blot analysis of CD220 on a mouse liver lysate. Lane 1: 1:250; lane 2: 1:500; lane 3: 1:1000 dilution of the anti- CD220 antibody.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. Store undiluted at -20° C.

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Application Notes

Application

r	pheation			
	Western blot	Routinely Tested		
Immunofluorescence		Tested During Development		
	Immunoprecipitation	Tested During Development		

Suggested Companion Products

Catalog Number	Name	Size	Clone
554002	HRP Goat Anti-Mouse Igs	1.0 ml	(none)
554001	FITC Goat Anti-Mouse Igs	0.5 mg	Polyclonal

Product Notices

- 1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
- 2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
- 3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
- 4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

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